

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P292254

Luminaire Tested: **22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292254  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33296)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3690.0 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

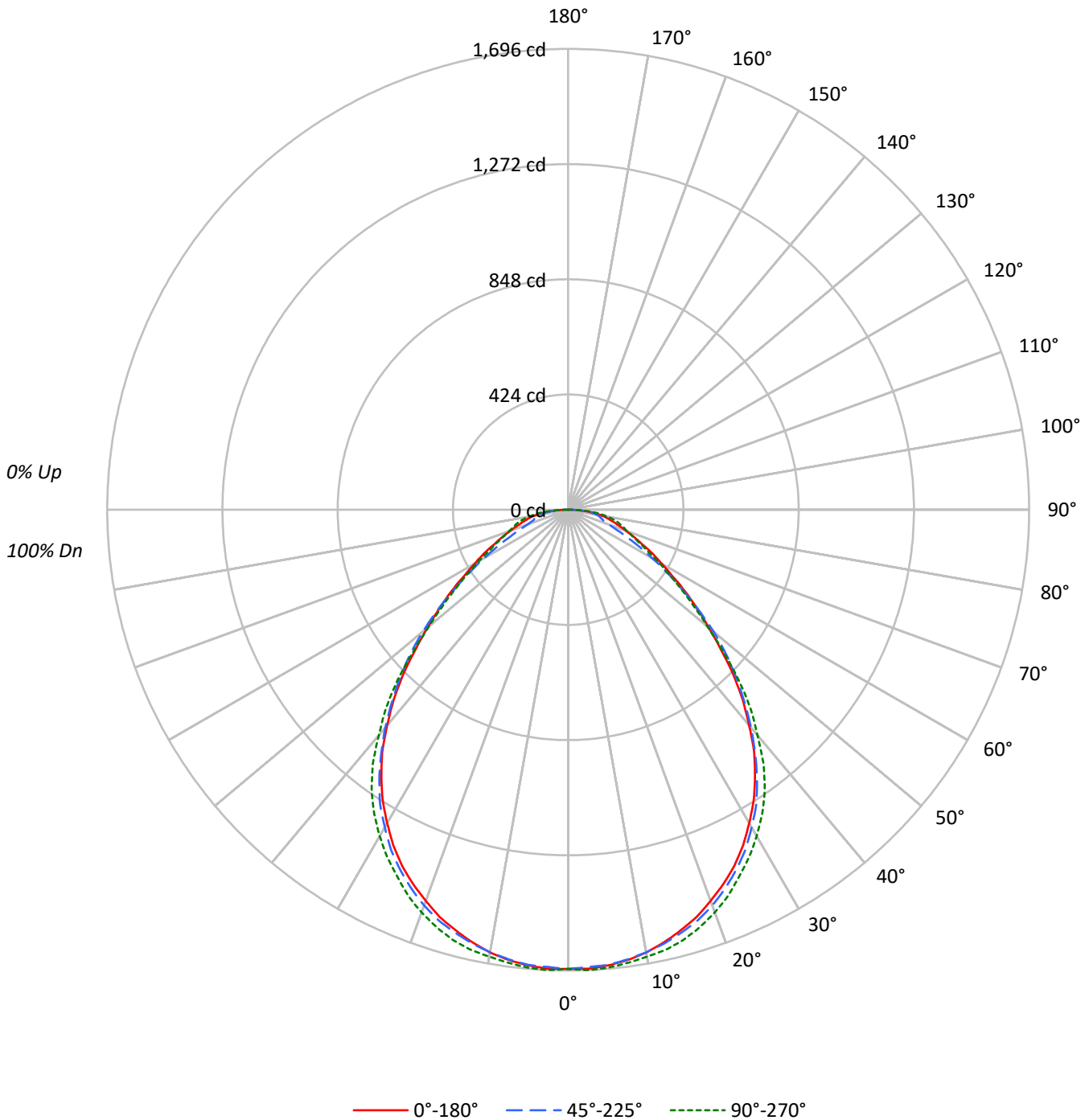
Input Watts (W): 35.805  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P292254

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P292254

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4547	4547	4547
5°	4549	4542	4569
10°	4521	4519	4564
15°	4464	4488	4567
20°	4387	4438	4517
25°	4293	4342	4421
30°	4138	4194	4309
35°	3935	3980	4141
40°	3638	3677	3807
45°	3268	3326	3379
50°	2825	2926	2797
55°	2465	2401	2369
60°	2135	1922	2052
65°	1908	1509	1843
70°	1770	1250	1817
75°	1768	1321	2018
80°	1956	1663	2275
85°	2041	1803	2572



TEST NUMBER: P292254

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.9	4.3
10°-20°	455.5	12.3
20°-30°	673.6	18.3
30°-40°	760.1	20.6
40°-50°	670.1	18.2
50°-60°	459.7	12.5
60°-70°	271.2	7.4
70°-80°	169.3	4.6
80°-90°	70.6	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1289.0	34.9
0°-40°	2049.1	55.5
0°-60°	3178.9	86.1
0°-90°	3690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1684	1680	1681	1687	1692	160
15°	1602	1604	1611	1631	1639	452
25°	1446	1451	1462	1481	1489	664
35°	1198	1208	1212	1241	1260	746
45°	859	863	874	879	888	660
55°	526	513	512	495	505	471
65°	300	264	237	274	289	302
75°	170	153	127	178	194	182
85°	66	62	58	76	83	71
90°	0	0	0	0	0	



TEST NUMBER: P292254

CATALOG NUMBER: 22GR-LD5-43-A-UNV-L93050-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1689.9	1689.9	1689.9	1689.9	1689.9
2.5°	1690.7	1686.5	1684.7	1691.6	1695.9
5°	1683.9	1680.4	1681.3	1687.3	1691.6
7.5°	1671.9	1669.3	1669.3	1677.9	1682.2
10°	1654.7	1653.8	1653.8	1664.1	1670.1
12.5°	1630.6	1631.5	1634.9	1648.7	1659.0
15°	1602.3	1604.0	1610.9	1630.6	1639.2
17.5°	1571.4	1571.4	1585.1	1600.6	1610.9
20°	1531.9	1534.5	1549.9	1567.1	1577.4
22.5°	1491.5	1495.8	1508.7	1528.5	1537.9
25°	1446.0	1451.2	1462.3	1481.2	1489.0
27.5°	1392.8	1399.7	1411.7	1425.4	1441.7
30°	1331.8	1342.1	1349.8	1368.7	1386.8
32.5°	1270.0	1279.4	1288.0	1307.8	1328.4
35°	1197.9	1208.2	1211.6	1240.8	1260.5
37.5°	1124.0	1128.3	1130.0	1159.2	1180.7
40°	1035.6	1044.2	1046.7	1069.9	1083.7
42.5°	950.6	954.0	959.1	976.3	992.6
45°	858.7	863.0	874.1	879.3	887.9
47.5°	762.5	775.4	788.3	772.0	772.8
50°	674.9	685.2	699.0	668.1	668.1
52.5°	596.8	601.9	602.8	577.0	582.2
55°	525.5	512.6	511.8	494.6	504.9
57.5°	454.2	437.1	431.1	425.9	437.9
60°	396.7	365.8	357.2	364.9	381.3
62.5°	349.5	310.0	293.7	313.4	328.0
65°	299.7	263.6	237.0	273.9	289.4
67.5°	261.0	226.7	192.3	244.7	255.9
70°	225.0	198.4	158.9	222.4	231.0
72.5°	195.8	175.2	137.4	200.9	211.2
75°	170.0	152.8	127.1	177.7	194.1
77.5°	149.4	130.5	118.5	153.7	173.5
80°	126.2	107.3	107.3	128.8	146.8
82.5°	99.6	84.2	86.7	104.8	117.6
85°	66.1	61.8	58.4	76.4	83.3
87.5°	33.5	34.3	30.9	39.5	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)